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# NAVAL WAR COLLEGE Newport, R.I.

# TERRORIST APPLICATION OF OPERATIONAL ART

By

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Lieutenant Commander, United States Navy

A paper submitted to the Faculty of the Naval War College in partial satisfaction of the requirements of the Department of Joint Military Operations.

The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College or the Department of the Navy.

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## Abstract

# TERRORIST APPLICATION OF OPERATIONAL ART

The terrorist attacks committed by Osama bin Laden illustrate that he and his al Qaeda network have developed the ability to apply operational art and network centric warfare to terrorism. He has clearly defined policy objectives on which he bases his strategy and focuses his attacks on U.S. centers of gravity and critical vulnerabilities. He carefully develops and protects his own centers of gravity and is abetted by Wahhabi radicalism that is supported by the governments of various Gulf states and inculcated in Islamic religious schools. He successfully employs the basic principles of network centric warfare to multiply the effectiveness of his limited force structure by dispersing his forces into command and control, intelligence, logistics, and tactical nodes that are redundant and survivable.

Ultimately bin Laden fails at employing operational art. He draws the wrong lessons from American withdrawals from Beirut and Mogadishu, believing erroneously that the United States is too casualty-adverse to fight, even when it has compelling interests. By directly attacking the American homeland and increasing the level of terrorist violence by an order of magnitude, he galvanized the will of the American people rather than compelling the United States to abandon its policy objectives. In spite of this fundamental flaw in his strategy, his use of operational art makes him more dangerous than previous terrorists and has exposed critical weaknesses in the United States anti-terrorism posture. Furthermore, his successes may embolden others and provide lessons learned for those who wish ill towards the United States.

# **Preface**

The United States is now at war with a non-state actor who has demonstrated the ability to act at the tactical, operational, and strategic levels of warfare. On September 11, 2001, al Qaeda, a terrorist organization created and led by Osama bin Laden, inflicted more casualties on the United States than Japan did at Pearl Harbor with a force of six aircraft carriers, two battleships, three cruisers, eleven destroyers, and over 360 planes, and more than Saddam Hussein's million-man Iraqi Army did during the Persian Gulf War. Al Qaeda executed the attack with fewer than thirty men, about the strength of a Marine Corps rifle platoon. How al Qaeda developed into an organization capable of executing operations of this complexity is a question worth exploring and was the genesis of this paper.

There is a great deal of misunderstanding in the West regarding Islam in general, and the interaction between Islam and terrorism in particular. The imprecise use of terminology such as "jihad," "fatwa," and "Islamic fundamentalism" adds to the confusion. "Jihad" literally means, "striving" and implies a personal struggle to follow in the path of God. It also means the struggle between the house of God, *dar al-Islam*, and everything else—the house of war, *dar al-harb*. Jihad is compulsory to Muslims. It is a collective responsibility of the Islamic community to struggle against unbelief, but an individual duty to defend the Islamic community from attack. It is this teaching that is twisted by the likes of Osama bin Laden and misunderstood in the West. A "fatwa" is a religious ruling by an imam. Bin Laden is not an imam and the depth of his religious scholarship is shallow. He has no authority to issue a fatwa. "Islamic fundamentalism" is too broad a term to

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<sup>&</sup>lt;sup>1</sup> The New Encyclopedia Britannica, Micropaedia, 15<sup>th</sup> ed., s.v. "Pearl Harbor Disaster" and "Persian Gulf War." The death toll for the September 11 attacks is still unknown.

have much utility. There are fundamentalist movements in the Shia and Sunni branches of Islam, as there are in Christianity, but it is Wahhabism, a violent, intolerant, subset of Sunni Islam dating back to the eighteenth century teachings of Muhammad bin abd al-Wahhab, whose alliance with Muhammad Ibn Saud brought about the first Saudi Kingdom in 1773, that is inextricably linked to the terrorism with which America is faced today.<sup>2</sup>

Islam finds it roots in Christianity. In fact, Muslims believe that Mecca is the site where the Old Testament prophet Abraham, out of obedience to God, was to sacrifice his son, Isaac, when God stayed his hand. Though Muslims see Christianity as a superceded religion and believe such Christian doctrines as the Trinity and the divinity of Jesus are blasphemous, Islam is not inherently hostile to Jews and Christians, the "people of the book," with whom they share many prophets and traditions. Several works cited in this paper's bibliography, including Islam and the West by Bernard Lewis and God Has Ninety-Nine Names by Judith Miller, will afford the reader a broader understanding of Wahhabism's relationship to Saudi Arabia and of the relationship between Islam and the West. Samuel Huntington's Clash of Civilizations offers a grim, alternate viewpoint.

Osama bin Laden's biographer, Hamid Mir, has suggested that Osama bin Laden is merely a "poster boy" for al Qaeda and that the real brains lie elsewhere, most likely with Ayman al-Zawahiri, the leader of Egyptian radical group Islamic Jihad and thought to be bin Laden's second in command.<sup>3</sup> Since the thesis of this paper, that al Qaeda is employing operational art, implies operational leadership, the possibility that bin Laden might not be the mastermind behind al Qaeda presents a bit of a problem. The fact that al Qaeda has developed an ability to apply operational art

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<sup>&</sup>lt;sup>2</sup> Judith Miller, <u>God Has Ninety-Nine Names</u> (New York: Simon & Schuster, 1996), 96.

to achieve strategic goals is more important than whether bin Laden is merely a figurehead. The salient point is that whoever leads al Qaeda has at least an intuitive understanding of the principles of operational art. For the purpose of this discussion, Osama bin Laden is used as shorthand to express the combined abilities of al Qaeda's leadership, just as mentioning the leadership of President George W. Bush implies the contribution of advisors such as Dick Cheney, Donald Rumsfeld, Colin Powell, and Condaleeza Rice. There is ample evidence that Osama bin Laden created al Qaeda and that his leadership, oratory, finance, and vision have been essential to al Qaeda's growth and operational success.

<sup>&</sup>lt;sup>3</sup> Scott Baldauf, "The 'cave man' and Al Qaeda," <u>The Christian Science Monitor</u>, 31 October 2001. <a href="http://www.csmonitor.com/2001/1031/p6s1-wosc.html">http://www.csmonitor.com/2001/1031/p6s1-wosc.html</a> [20 December 2001].

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#### INTRODUCTION

The terrorist attacks committed by Osama bin Laden illustrate that he and his organization, al Qaeda, have developed a rudimentary understanding of the principles of operational art and network centric warfare and how to apply them to terrorism. The terrorist actions conducted by his network have evolved from isolated tactical actions to sophisticated strikes, synchronized in time and space, such as the simultaneous attacks against U.S. embassies in Kenya and Tanzania on August 7, 1998, and to the complex operation conducted on September 11, 2001, against multiple targets within the United States. Without operational art, war would be a set of disconnected engagements with attrition as the only measure of success.<sup>2</sup> The September 11 attacks indicate that bin Laden is moving beyond the attrition warfare typical of terrorism and targeting critical vulnerabilities and centers of gravity. He uses the basic principles of network centric warfare to multiply the effectiveness of his limited forces by dispersing them into survivable, redundant nodes. This paper explores how Osama bin Laden applies the principles of operational art and netted warfare to terrorism and recommends how the United States can protect its own vulnerabilities while exploiting those of bin Laden.

There are many definitions of terrorism, but almost all mention that it is terrorism's political ends that distinguish it from other forms of violence.<sup>3</sup> It is this political nature of terrorist violence that is at the heart of terrorism's strategic relevance. International terrorism is generally tactical in execution but strategic in objective. For this reason, terrorism does not fit neatly into our understanding of the levels of war—tactical, operational, and strategic.<sup>4</sup> One usually does not think of terrorists as functioning in the realm of strategy because terrorist organizations are not states, but terrorism does not exist merely at the tactical level of war because it is focused on strategic, not

tactical, objectives. Al Qaeda is a transnational organization, analogous in some ways to a multinational corporation. It operates worldwide, has enduring policies, and has much broader objectives than the typically narrow, local goals of most terrorists.

Concepts such as "operational fires" stretch the context of operational art when one tries too hard to adapt them to terrorism with artificial constructs such as "terrorist fires." However, many of the operational functions inherent to operational art—logistics, command and control, command and control warfare, intelligence, protection—as well as the factors of time, space, and force, are relevant to a discussion of terrorism. The trick is to know when the concepts of operational art are relevant and not to force the issue when they are not.

Not every aspect of bin Laden's actions apply at the operational level of war. What is important is that he demonstrates the ability to apply those principles that do. Even when his actions fail to meet strict definitions of operational terminology as understood in U.S. joint doctrinal publications, they provide a disturbing illustration of what a determined, operationally savvy, strategically focused terrorist might do. Much of what can be said about al Qaeda's operations is conjecture because one has no access to al Qaeda doctrine and plans. One is forced to draw conclusions from analyzing past actions, open source, declassified intelligence, Osama bin Laden's limited public remarks, and accounts in the press. Most disturbing is the trend bearing evidence that al Qaeda is learning operational art by practicing it, because the practical application of operational art precedes theory. As al Qaeda's learning curve steepens, the United States' security challenge will become more difficult.

The September 11, 2001 attacks on the United States are significant in several respects.

They are a new order of magnitude in terrorist violence—deaths in the thousands vice hundreds.

The terrorists who led the attacks were men in their early to mid-thirties, multilingual, university educated, experienced operatives, with families, who have lived extensively abroad. They were closer to the profile of U.S. special operations force soldiers than that of a typical suicide bomber—young, impoverished men, in their early twenties, with a radicalized education. The leaders were experienced, proven operators in Osama bin Laden's organization, resources he cannot afford to expend lightly. Bin Laden did not waste forces attacking low-value, yet vulnerable, targets. He economized his forces by using them decisively against the main objective. This attack was a rational act and, given the preparation and deliberate expenditure of limited assets, it signals both a new phase in the conflict with al Qaeda—now a U.S. war on terrorism—and a watershed event in the history of terrorism: the first real application of the principles of operational art and netted warfare by a terrorist organization. Ultimately, however, Bin Laden's application of operational art is gravely flawed.

# STRATEGY AND POLICY

Policy dominates strategy and strategy guides operational art, so a brief discussion of Osama bin Laden's policy and strategy is a useful starting point for understanding his application of operational art.<sup>6</sup> The United States is one of the few nations that publish its National Security and National Military Strategies. Al Qaeda, a transnational organization, is not a state but it does have policy objectives and strategic goals that are much broader than the limited, local focus typical to terrorist organizations. Bin Laden consistently has named four main grievances against the United States that define his policy objectives: the continued presence of U.S. troops in Saudi Arabia, U.S. support for Israel, U.S. treatment of Iraq, and U.S. support for "apostate" Islamic regimes such as Egypt and Saudi Arabia.<sup>7</sup> It follows that Bin Laden's policy is to compel the United States

to remove its troops from Saudi Arabia, compel the United States to abandon its economic and military policies against Iraq, undermine the security relationship between the United States and Israel, and to dismantle the relationships between the United States and various Arab regimes.

Terrorism is the centerpiece of his strategy for effecting this policy. In bin Laden's statements, one does not see him rail against the decadence of Western culture—drug and alcohol abuse, sexual permissiveness, illegitimacy, equality for women, tolerance of homosexuals, secularism.

Consistently, bin Laden addresses his policy objectives.<sup>8</sup>

Osama bin Laden's policies are hostile to U.S. policies in the Middle East, which emphasize a lasting and comprehensive Middle East peace, security and well being for Israel, security assistance to Arab partners, and access to critical energy resources. To achieve his policy objectives, bin Laden must compel the United States to abandon or alter its policy objectives. To do this, he must raise the cost of the political object beyond its value. Bin Laden's rational calculus leads him to believe that the objective is more valuable to him than it is to the United States and the West. Understanding his adversary's critical strengths, weaknesses, vulnerabilities, and center of gravity is the key raising that cost.

The operational commander bears primary responsibility for planning the campaign.

Essential to this end is determining the adversary's critical strengths and weaknesses, his vulnerabilities, and, most importantly, his center of gravity. The operational commander must decide against which objective to direct the main effort, what mix of forces to use and how to employ his forces for best effect, the scheme of operational maneuver, and how to protect his own center of gravity. The operational commander must assert unity of command to achieve unity of effort based on commander's intent and must plan for the decentralized execution of task-oriented orders to

preserve freedom of action.<sup>11</sup> Osama bin Laden has shown an intuitive understanding of all these operational functions.

#### CRITICAL STRENGTHS

The United States has several critical strengths at the strategic and operational levels of war. At the strategic level, the United States has a democratic, plural society that is resilient, adaptable, and tolerant; a robust, diverse, economy that is the largest in the world and a source of great power; strong government institutions, in which Americans have an abiding faith, that transfer power smoothly and predictably; vast natural resources to sustain its people, including abundant arable land and clean water; a large, technologically unsurpassed military that is highly mobile, forward deployed worldwide, and well led; and tremendous capabilities for gathering and processing intelligence. Operationally, its critical strengths derive from the robust, diverse, capabilities of its military and forward presence, mobility, and power projection capabilities. These are formidable strengths that should give pause to any adversary.

# CRITICAL WEAKNESSES AND VULNERABILITIES

Among U.S. critical weaknesses, as bin Laden might perceive them, are: an aversion to casualties; an aversion to protracted conflict; an aversion to collateral damages; inadequate homeland defense; ethnic, racial, cultural, and religious diversity; a very legalistic view of terrorism as a law-enforcement rather than military responsibility; and an unfettered press that freely criticizes the government and other institutions. U.S. aversion to casualties, especially, has been a consistent theme in bin Laden's speeches<sup>12</sup>.

Critical vulnerabilities are those critical weaknesses and strengths that are vulnerable to attack. Among U.S. critical vulnerabilities that Osama bin Laden might exploit are the

aforementioned critical weaknesses. Aversion to casualties, collateral damages, and protracted conflict might make a Fabian or attrition strategy attractive to a weaker adversary such as bin Laden. Diversity, civil liberties, and constraints on the military can facilitate terrorist activities. Inadequate homeland defense leaves vulnerable several of America's critical strengths, such as its economy and natural resources, as well as its citizens.

Part of the United States' homeland defense vulnerabilities is a sub-optimal space to force ratio. Homeland defense suffers from inadequate unity of command, in spite of a newly established Office of Homeland Defense. The effort is supported by a hodgepodge of federal, state, and non-government organizations with sometimes overlapping and sometimes conflicting areas of expertise, responsibility, and jurisdiction. A combination of the *Posse Comatatus* Act and traditional American reluctance to see U.S. soldiers deployed on U.S. soil, limits how much the military can contribute to the homeland defense force structure. This inadequate defense of the homeland is a vulnerability that al Qaeda can exploit, as do smugglers of drugs and illegal aliens.

### **CENTERS OF GRAVITY**

Centers of gravity, which may exist at each of the levels of war, derive from critical strengths.<sup>14</sup> At the strategic level, the United States' center of gravity is its will to fight, a will that is founded upon the aforementioned critical strengths, and fueled by a righteous indignation and horror at the atrocities visited upon it on September 11<sup>th</sup>. America will fight in self-defense with much greater ardor than it would to sustain regional policies. This is where Osama bin Laden has made his gravest error. Like the Japanese in World War II, he has provoked a sleeping dragon.

Focusing on the U.S. strategic center of gravity is a crucial distinction from previous terrorist attacks. In terms of operational art, orienting on the center of gravity is essential to campaign

planning.<sup>15</sup> The attacks on the World Trade Center complex and the Pentagon are part of a larger military and political strategy to achieve bin Laden's stated policy objectives by raising the cost of adhering to political objectives that he opposes beyond their value to the United States—in blood and treasure. There are many examples of countries whose will to fight evaporated after a limited tactical defeat, such as the French at Dien Bien Phu in 1954, or even at the perception of enemy strength, such as the surprise of the 1968 Tet Offensive.<sup>16</sup> More relevant to bin Laden is the sight of U.S. troop withdrawals in the face of tactical losses in Beirut, Lebanon, in 1983 and Mogadishu, Somalia, in 1993, incidents to which he often refers.<sup>17</sup>

In order to exploit U.S. critical vulnerabilities and attack the U.S. strategic center of gravity, Osama bin Laden directed strikes against high-value targets in the U.S. homeland. These actions were primarily strategic as they were designed to have a major effect on the war as a whole rather than to shape the battlefield to facilitate an operation. Like the Doolittle Raid of World War II, these terrorist strikes have had additional operational effects—planned or not—of causing the United States to dedicate more resources to defending its boarders, coastlines, and interior. The Commandant of the Coast Guard, Admiral Loy, pointed out that by November 2001 drug interdiction efforts had been curtailed to twenty-five percent of what they had been prior to September 11; fisheries enforcement had dropped even further. The Washington Post article in which his comments were made was also posted on the Cannabis News website. Other adversaries will no doubt exploit U.S. vulnerabilities as well, necessitating a greater outlay of resources to U.S. homeland defense.

It is speculative whether Osama bin Laden directly targeted the U.S. economy with the September 11 attacks or whether the economic impact was merely an unintended consequence.

Though the scope of the impact was probably unforeseen, there is anecdotal evidence to support the conjecture that the U.S. economy was an objective of the attack. The World Trade Center complex is not merely symbolic, but the center of America's financial district. Osama bin Laden is believed to have studied economics at King Abdul-Aziz University in Jeddah.<sup>21</sup> He helped run his family's construction company, the largest in Saudi Arabia, and, while living in Sudan, was one of Sudan's "most active businessmen." Evidence that he sold stocks short to benefit from the collapse of the U.S. stock market would indicate that he was aware of the economic impact of the operation, though this allegation is still unproven.<sup>23</sup> It is clear, however, that Osama bin Laden understands economics and has surrounded himself with technically educated advisors: accountants, engineers, doctors, and computer experts.<sup>24</sup>

The U.S. economy would be an obvious U.S. critical strength and a factor in the U.S. strategic center of gravity. Even in his first declaration of war against the United States in December 1996, bin Laden mentions the boycott of American goods. Cards distributed at a May 1998 conference with bin Laden in Afghanistan by the sons of Sheikh Omar Abdel Raman, currently imprisoned in the United States for his role in the 1993 World Trade Center bombing, called Muslims to jihad against Jews and Christians to "divide their nation, tear them to shreds, destroy their economy, burn their companies, ruin their welfare, sink their ships and kill them on land, sea, and air." Analysts predict that the September 11 attacks will cost the United States 1.6 million jobs in 2002, cause \$83 billion in damage to New York City's economy, and may prolong America's economic recession. Even if the economic effects of the attacks were unintended, bin Laden will likely learn from this experience, as will other hostile observers.

Terrorism creates psychological effects disproportional to its physical effects. This helps bin Laden compensate for a lack of force and compels the United States to commit tremendous resources to combating him. Tactical events of relatively minor military significance can have major strategic importance, as did the loss of eighteen U.S. soldiers in Mogadishu in October 1993, the accidental bombing of the Chinese embassy in Belgrade in May 1999, and Iraqi SCUD missile attacks on Israel during the Gulf War.<sup>28</sup> Normally space works to a large country's advantage space to trade for time, defense in depth, room to maneuver—but, in the United States, vast amounts of undefended space, coupled with a very free and open society, confer on the terrorist some advantages such as freedom of movement. Modern, civil aviation compresses time and space, allowing terrorists to move quickly between theaters and within the battlespace to carry out the operational functions required by an operational commander. Cyberspace adds a new, virtual dimension to the concept of space and is a key area of concern for defending the homeland. In cyberspace, time and force become almost insignificant: anyone with access to the Internet has access to the battlespace.

Al Qaeda's attacks have been extremely violent compared to most other terrorist organizations that wanted publicity more than casualties. In the past, high casualties were seen to be counterproductive. High casualties work for al Qaeda for several reasons. First, high casualties fit with their strategic objective of driving Western powers from *dar al-Islam*, the land of Islam, by raising the cost of the policy objective beyond its value. Second, in war, destruction of the enemy is an end to itself. In Osama bin Laden's version of jihad, all unbelievers are the enemy and he has specifically advocated the killing of civilians. Third, high casualties and high profile terrorist spectacles demonstrate to like-minded people that the West is vulnerable and can be attacked

successfully, on its own soil, on a grand scale. Lastly, it gives al Qaeda credibility—people gravitate towards power and decisive leadership, especially the downtrodden, marginalized, and politically disenfranchised.<sup>29</sup>

## OSAMA BIN LADEN'S CENTER OF GRAVITY

An operational commander must not only define his adversary's center of gravity; he must cultivate and protect his own while minimizing his vulnerabilities. At the operational level of war, the leadership of his al Qaeda organization and its cadre of dedicated fighters is bin Laden's center of gravity. They form his command and control and serve as the nexus that links him tactically to affiliated terrorists worldwide. Lacking a true nation-state, bin Laden does not have a true strategic center of gravity, though some of his critical strengths are strategic in nature. These centers of gravity derive from certain critical strengths.

Bin Laden's critical strengths are his al Qaeda organization; his cadre of trained, dedicated fighters, many of whom are veterans of the war against the Soviets in Afghanistan; his worldwide federation of Islamic terrorist organizations, many of whose fighters were training in al Qaeda camps; and the ideological underpinning supplied by a Wahhabi Islamic theology that is intolerant, violent, and fanatical. He enhances the strength of his forces by dispersing and linking them in a network. Wahhabism, predominant in Saudi Arabia and the Gulf states, provides a transnational ideology. <sup>30</sup> Significantly, all three countries that recognized the Taliban as the legitimate government of Afghanistan—Saudi Arabia, the United Arab Emirates, and Pakistan—also support Wahhabism. Though Saudi Arabia has officially denounced bin Laden and terrorism, Wahhabism has been inextricably linked historically to the political fortunes of the House of Saud, and Saudi Arabia has

been the key to the growth of Wahhabism.<sup>31</sup> Saudi support of Wahhabism has strategic implications.

Among his critical weaknesses are the limited numbers of forces that he controls, especially those able to plan and execute complex operations; a lack of sophisticated weaponry; a lack of secure, real-time communication assets; and, strategically, the fact that the austere form of Islam that he espouses is not universally endorsed. Presently, his lack of weapons of mass destruction is a weakness; however, bin Laden has expressed the desire to add these weapons to his arsenal, which could offset other weaknesses.<sup>32</sup>

Wahhabism's strategic implications stem from Saudi financial support that has allowed Wahhabism to be exported to the Balkans, Central Asia, and the United States.<sup>33</sup> Wahhabi imams control the majority of mosques in America.<sup>34</sup> Wahhabism is the theology of the Taliban and is taught in the *madrassas*—Islamic schools—along the Pakistani-Afghan boarder. *Madrassas* flourish in Pakistan where over 7,000 of these religious schools educate over 600,000 students.<sup>35</sup> General Zia ul-Haq, who ruled Pakistan in the 1980s, supported the *madrassas* as recruiting grounds for the war against the Soviets and packed his army with Islamists.<sup>36</sup> Certainly not all madrassas are training students for holy war, but they are a radicalizing influence, and radicalized Islam is a powerful force for bin Laden. Poverty exacerbates the problem, leaving *madrassas* as the only educators in much of the region. Whereas Americans see war as an aberration, something to be won quickly so everyone can get back to a normal existence of family and productive work, for many of bin Laden's followers, war is all they have ever known. For many in the poorest parts of the world, war and barracks life is a step up in the world.<sup>37</sup> Poverty does not cause terrorism, but a combination of poverty, demographics, and a radical theology forms a fertile environment in

which terrorism may grow. Bin Laden works to develop this critical strength by appealing broadly to Arabs and Muslims who do not necessarily share his agenda. His December 22, 1998, declaration of the World Islamic Front focused on issues that resonate even with moderates: U.S. persecution of the Iraqi people and U.S. policy regarding Palestine.<sup>38</sup>

Wahhabism and the war in Afghanistan were the defining influences for bin Laden and his international terrorist movement. The early 1980s found bin Laden, like many other Muslims from around the world, in Pakistan and Afghanistan supporting the mujahideen in their fight against the Soviets.<sup>39</sup> Early in the war he was focused on logistics such as recruiting, finance, and construction. He used his construction knowledge and finance to import heavy equipment and build infrastructure such as roads, caves, tunnels, fighting positions, and weapons depots. He established the Jihad Service Bureau for propaganda and charity, and established guesthouses in Pakistan for foreign fighters en route to Afghanistan. By 1986 he was in combat and in 1989 he founded al Qaeda, originally to track the ebb and flow of foreign fighters and to list the dead and wounded. Al Qaeda would evolve into a large clearinghouse for radical Islamic organizations.<sup>40</sup> Fighting in Afghanistan would focus bin Laden on foreign threats to Islam and leave him disdainful of superpowers. 41 It is estimated that twenty-five to fifty thousand foreigners fought in Afghanistan. 42 Though they played a minor role in the Afghan conflict, they would become a critical strength and the nexus between al Qaeda and its network of affiliated organizations.

Osama bin Laden's tactical centers of gravity derive from his al Qaeda organization, affiliated terrorist groups that share his goals, and the cadre of fighters he has trained. About 4,000 fighters make up al Qaeda's core while a vast gray area of overlap exists between this core and the many militant groups that have received training in al Qaeda camps.<sup>43</sup> German intelligence estimates

that 70,000 fighters received such training.<sup>44</sup> Bin Laden established his credentials as leader of the jihad movement by participating in Islamic struggles, particularly in Afghanistan. He has a core of dedicated followers who are battle hardened from participation in international terrorism and Islamic nationalist struggles in Afghanistan, Chechnya, Palestine, and Somalia. Peter Bergen points out that "it is bin Laden's ability to attract recruits willing to martyr themselves that is the priceless commodity in his holy war."

Wahhabism and other radical, fundamentalist forms of Islam, however, do not have universal appeal. This is a critical vulnerability for bin Laden. Even in Afghanistan, which the Taliban controlled for more than a decade, the Taliban and Osama bin Laden were unable to mobilize the public to fight the United States and its allies. This was a key reason for their swift defeat. Some scholars, however, such as Samuel Huntington, see an inevitability of war between Islam and the West because of the few prohibitions Islam has against violence, the absolutism of Islam that draws a sharp line between *Dar al-Islam* and *Dar al-harb*, the proximity of Islam and the West in Europe, the lack of a core state in the Islamic world which contributes to instability in the Islamic world, and the demographic explosion in the Islamic world that provides a large pool of unemployed, young males as a source of violence and instability. The ideal of a unified *Dar al-Islam* as one polity under a single sovereign caliphate is an enduring theme in Islam that appeals to bin Laden as an overarching goal.

#### **NETTED WARFARE**

Critical to al Qaeda's strength is the networked nature of its command and control and force employment. The three main tenets of network centric warfare are employing forces that are geographically dispersed, knowledgeable, and effectively linked.<sup>49</sup> Bin Laden has emplaced a

worldwide network of logistics, intelligence, command and control, and tactical nodes that are both virtual and physical. Some provide safe houses, others provide financial support or human intelligence, some are small tactical cells, and some are merely sympathizers. Dispersal gives them a smaller 'battlespace footprint' and enhances their maneuverability. It allows bin Laden to mass effects instead of forces, which exposes fewer of his forces to danger—an important aspect of force protection for al Qaeda, one of whose critical weaknesses is its small number of forces. Al Qaeda forces are knowledgeable of their commander's intent from their indoctrination at al Qaeda training camps, fatwas, and bin Laden's declarations. Though it lacks the robust, real-time links that U.S. forces enjoy, bin Laden's network has made good use of the Internet and the media to stay effectively linked.<sup>50</sup> In the realm of network centric warfare, Metcalf's Law states that the potential value of a network increases exponentially as the number of nodes increases linearly.<sup>51</sup> Bin Laden similarly increases the value of his forces by dispersing and linking them. They are widely dispersed throughout the world and make up a robust, survivable network.

A network is not enough to create value without accompanying doctrine and organization to support it and exploit its advantages.<sup>52</sup> Though one has little access to what might be called al Qaeda's doctrinal publications, some assumptions can be drawn from analyzing what is known about the organization. Because al Qaeda evolved as an umbrella organization that sometimes coordinates and sometimes directs the activities of the federation of associated terrorist groups, bin Laden must take advantage of certain network centric principles to achieve his objectives. He seems to recognize that, as the decision maker, he does not necessarily need to own either the sensors or the shooters.<sup>53</sup> He gains advantages such as deniability and dispersal by not owning them. Bin Laden has adopted the decentralized command and control structure that is a principle of

network centric warfare, rather than the traditional hierarchal structure. He issues task-oriented orders based on commander's intent and self-synchronization. He seems to grasp the fundamental principles of operational leadership, among which is the idea that "there is no greater error for a higher commander than unduly interfering with the actions and decisions of a subordinate commander." In terms of operational art, bin Laden's use of netted warfare and decentralized command are significant successes.

Conveniently, al Qaeda uses the West's communication systems, such as the Internet. His adversaries cannot interdict these systems without degrading their own capabilities. Al Qaeda forces use their opponent's open society and guarantee of civil liberties for advantage and are abetted by Saudi Arabian export of Wahhabism. They take advantage of the Western media for operational and real-time, tactical intelligence. They use neutral banks for financial management and invest in the markets of their adversaries. These logistics nodes provide a networked base of operations within the battlespace that is very different from the typical linear base of operations from which forces have historically proceeded along lines of operations, though intermediate bases, to the area of operations. Al Qaeda is a netted system that is dispersed, yet linked, which allows bin Laden to mass effects when necessary.

As much as bin Laden shows an intuitive understanding of the benefits of network centric warfare and operational art, he is still at a major technological disadvantage against the United States. He offsets this somewhat with a superior human intelligence collection capability, which is especially important in low-intensity conflict. His intelligence capability is aided by the openness of Western society and the ubiquitous Western media. Bin Laden overcomes his weakness in communications by using Internet chat rooms, embedding images in pornographic websites, and

encrypting electronic mail.<sup>55</sup> The Internet allows him to organize, coordinate, and communicate with large numbers of followers, donors, and potential recruits.<sup>56</sup> He uses the media to broadcast videos that contain veiled messages for his followers. In a video released just prior to the *USS Cole* bombing, he was shown wearing a Yemeni dagger, a *jambiya*, something he had never before been known to do.<sup>57</sup>

#### **MISSTEPS**

It is yet to be seen whether Osama bin Laden can follow up the September 11 operation with successive operations to maintain a high operational tempo and press towards a culminating point. This would be to his advantage. Given the long lead time required for the attacks on September 11, the *USS Cole*, and the embassies in Africa, it would seem likely that he planned follow-up attacks well in advance. Officials in Singapore announced in January 2002 that they foiled a plot by al Qaeda-linked terrorists to attack Western interests in that country, including embassies and U.S. warships.<sup>58</sup>

Osama bin Laden underestimated the United States' ability to react so swiftly in rounding up al Qaeda operatives and sympathizers worldwide, freezing financial assets, and invading Afghanistan. He may have expected only minimal reprisals with air strikes and missiles. He overestimated the pan-Arab support his attacks would inspire. Still, time is measured differently in the Islamic world, and Osama bin Laden has shown great patience and determination. An operational pause might be part of his strategy. A high profile, major operation like the one executed on September 11, conducted after he appears to have been beaten, could have a profound psychological effect in the same way the 1968 North Vietnamese Tet Offensive discredited U.S. military assurances that it was winning the war in Vietnam. In spite of the fact that

foreign fighters played a minor role in the anti-Soviet war in Afghanistan, bin Laden believes erroneously that he beat one superpower in a protracted, ten-year struggle and assumes he can beat another.<sup>59</sup>

Command and control warfare is an important method of shaping the battlefield by disrupting the enemy's decision-making cycle. This is an operational function that bin Laden seems to have ignored so far. If Osama bin Laden's attack on the Pentagon and failed attack on the White House were attempts at operational command and control warfare, they indicate a fundamental lack of understanding of America's military command structure and laws for Presidential succession.

The irony of bin Laden's strategy is that the United States is now galvanized to eliminate terrorist cells in the countries that harbor them. Possibly, Osama bin Laden foresaw that the September 11 attacks would bring massive retaliation and he was counting on this to further his goals by propagandizing civilian casualties caused by U.S. military attacks, encouraging spontaneous attacks against the West, and luring U.S. ground forces into a protracted, Soviet-style debacle in Afghanistan. Walter Lacquer points out a further irony. Though modern dictatorships have had success in stamping out terrorism with brutal, ruthless, determined repression, democratic societies have been reluctant to curtail traditional freedoms and civil rights as long as terrorism did not exceed a nuisance level. Once terrorism rises to the level where it threatens the daily function of a society, the government will be under great pressure to defeat it using all means, "hence, the paradoxical conclusion that the more successful the terrorists, the nearer their ultimate defeat." If bin Laden's goal was to attack the will of the U.S. people, he seems to have achieved exactly the opposite. Choosing the wrong strategy for attacking the U.S. center of gravity is the fatal flaw in his application of operational art.

### CONCLUSIONS

Osama bin Laden and al Qaeda manage a transnational organization with its own political objectives and strategy. They apply the principles of operational art to conduct worldwide operations that are synchronized in time and space and directed at U.S. centers of gravity and critical vulnerabilities. Bin Laden uses a dispersed network of command and control, intelligence, logistics, and tactical nodes to compensate for limited numbers of forces and uses well-trained, dedicated forces, analogous to special operations soldiers, as force multipliers. Al Qaeda has demonstrated the ability to conduct detailed logistical and operational planning and to acquire mission essential skills. It places no limits on the use of violence and is actively trying to obtain weapons of mass destruction. These factors make al Qaeda significantly more dangerous than any previous terrorist threats to America. Though its present strategy is gravely flawed, al Qaeda will continue to improve its abilities in the realm of operational art and netted warfare until it is defeated and others will learn from its example.

Wahhabism provides the theological underpinning of bin Laden's ideology and is a source of strength for his organization. For political reasons, the Saudi government supports the spread of this austere version of Islam even as it condemns bin Laden and terrorism. This policy is incompatible with Saudi Arabia's relationship to the United States. Islam is not a threat to the West, but Wahhabism is.

### RECOMMENDATIONS

• To address its own critical vulnerabilities, the United States must:

- Examine whether its Middle East policies are just and consistent with national interests and be able to explain to its citizens and the world why these policies are just and worth the costs in blood and treasure. Invest in homeland defense for the long term. Fund the Coast Guard and other federal agencies adequately.
- Consider legislation that consolidates the homeland defense functions of various federal law, immigration, and customs organizations into a single force structure.
- Review laws that restrict the use of the Armed Forces for homeland defense. Examine whether those restrictions are valid or merit modification.
- Recognize that a free, open, diverse society and an unfettered press are greater strengths than vulnerabilities. Limits on civil liberties should be imposed with great reservation, careful consideration, and only where compelling interests exist.
- To exploit Osama bin Laden's vulnerabilities, the United States must:
  - Focus counter-terrorism efforts on terrorist centers of gravity. For al Qaeda, this means its leadership and core cadre of fighters.
  - Destroy al Qaeda's network by interdicting its command and control, communications, logistics, finance, and mobility functions.
  - Deny terrorists safe haven by cooperating with allies and by unilateral action, when absolutely necessary.
  - Support the efforts of moderate Muslims to reverse the spread of Wahhabism.
  - Develop better intelligence gathering capabilities, especially human intelligence, in failed, failing, and troubled states.

- Provide foreign aid in ways that enhance the stature of moderate, pro-Western governments and where it can alleviate the poverty and hopelessness that provides fertile ground for terrorist recruiters.
- Monitor and interdict the proliferation of weapons of mass destruction and the technology, expertise, and raw materials needed to produce them.
- Recognize that the war on terrorism is not a war between the West and Islam and do not allow it to become one.

# **ENDNOTES**

<sup>1</sup> Operational art is defined in U.S. joint doctrine as "the use of military forces to achieve strategic goals through the design, organization, integration, and conduct of strategies, campaigns, major operations, and battles." Joint Chiefs of Staff, <u>Doctrine for Joint Operations</u>, Joint Pub 3-0 (Washington, DC: 10 September 2001), xii. Dr. Milan Vego of the Naval War College further explains, "operational art occupies an intermediate and indispensable position between policy and strategy on the one hand and tactics on the other. It serves both as a bridge and as an interface between these two areas of study and practice." Milan N. Vego, <u>Operational Warfare</u> (n.p.: n.p., 2000), 1. Network centric warfare is defined as "an information superiority-enabled concept of operations that generates increased combat power by networking sensors, decision makers, and shooters to achieve shared awareness, increased speed of command, higher tempo of operations, greater lethality, increased survivability, and a degree of self-synchronization." David S. Alberts, John J. Garstka, Frederick P. Stein, <u>Network Centric Warfare</u>, (Washington, D.C., 1999), 2.

<sup>2</sup> Joint Chiefs of Staff, <u>Doctrine for Joint Operations</u>, II-3.

<sup>3</sup> The U.S. government defines terrorism as "premeditated, politically motivated violence perpetrated against non-combatant targets by subnational groups or clandestine agents, usually intended to influence an audience." For more on how terrorism is defined see: Paul R. Pillar <u>Terrorism and U.S. Foreign Policy</u> (Washington DC: Brookings Institute Press, 2001), 12-18. Another useful definition of terrorism is "the deliberate and systematic murder, maiming, and menacing of the innocent to inspire fear for political ends." Benjamin Netanyahu "Defining Terrorism" <u>Terrorism: How the West Can Win</u> ed. Benjamin Netanyahu (New York: Farrar, Straus, Giroux, 1986),

- <sup>4</sup> A detailed discussion of the levels of war and levels of command can be found in: Vego, 17-25.
- <sup>5</sup> Vego, 7.
- <sup>6</sup> Ibid, 593 and 4.
- <sup>7</sup> Peter L. Bergen, Holy War, Inc. (New York: The Free Press, a Division of Simon & Schuster Inc., 2001), 222.
- <sup>8</sup> Bergen, 222; Ahmed S. Hashim, "The World According to Usama Bin Laden." <u>Naval War College Review</u>, (Autumn 2001), 23-28.
- <sup>9</sup> The White House, A National Security Strategy For a Global Age (Washington, DC: 2000), 58.
- <sup>10</sup> Carl Von Clausewitz, <u>On War</u>, trans. and ed. Michael Howard, Peter Paret (Princeton, NJ: Princeton University Press, 1976), 92.
- <sup>11</sup> Vego, 579.
- <sup>12</sup> Hashim, 25.
- <sup>13</sup> Vego, 309
- <sup>14</sup> Ibid.
- <sup>15</sup> Joint Chiefs of Staff, <u>Doctrine for Planning Joint Operations</u>, Joint Pub 5-0 (Washington, DC: 13 April 1995), xiii.
- <sup>16</sup> Vego, 5.
- <sup>17</sup> Hashim, 25.
- <sup>18</sup> Vego, 239.
- <sup>19</sup> Edward Walsh, "For Coast Guard, Priorities Shifted on September 11." <u>The Washington Post</u>. 26 November 2001. <a href="http://www.nci.org/01/11f/26-4.htm">http://www.nci.org/01/11f/26-4.htm</a> [7 January 2002].
- <sup>20</sup> Edward Walsh, "For Coast Guard, Priorities Shifted on September 11." <u>The Washington Post</u>. 26 November 2001. <a href="https://www.cannabisnew.com/news/thread11423.shtml">www.cannabisnew.com/news/thread11423.shtml</a> [7 January 2002].
- <sup>21</sup> Bergen, 47.
- <sup>22</sup> Ibid., 29.
- <sup>23</sup> "Bin Laden 'share gains' probe," <u>BBC News</u>, 18 September 2001,
- <a href="http://news.bbc.co.uk/hi/English/business/newsid\_1548000/1548118.stm/">http://news.bbc.co.uk/hi/English/business/newsid\_1548000/1548118.stm/</a> [13 January 2002]. There does not appear to be definitive proof that Osama bin Laden or elements in al Qaeda did, in fact, manipulate various stock

markets to benefit financially from the 11 September attacks. Other sources are skeptical because major stock manipulations might have compromised the attack plans.

- <sup>24</sup> Bergen, 28.
- <sup>25</sup> Hashim, 26.
- <sup>26</sup> Bergen, 101.
- <sup>27</sup> "Study: Attacks will wipe out 1.6 million jobs," Newport (R.I.) Daily News, 11 January 2002, A5; New York City Partnership, "Study: Economic Impact Analysis of the September 11<sup>th</sup> Attack on New York," Newsday. 15 November 2001. <a href="http://www.newsday.com/business/ny-biz-partnershipstudy1115.htmlstory">http://www.newsday.com/business/ny-biz-partnershipstudy1115.htmlstory</a> [22 January 2002]; Martin Crutsinger, "Greenspan: Economy still faces 'significant risks," Newsday. 11 January 2002. <a href="https://www.newsday.com/business/sns-greenspan.story?=ny%2Dbusiness%2Dutility">https://www.newsday.com/business/sns-greenspan.story?=ny%2Dbusiness%2Dutility</a> [22 January 2002].
- <www.newsday.com/business/sns-greenspan.story?=ny%2Dbusiness%2Dutility> [22January]
- <sup>28</sup> Alberts, Garstka, and Stein, 83.
- <sup>29</sup> James K. Cambell, <u>Weapons of Mass Destruction Terrorism</u>, (Seminole, FL: Interpact Press, 1997), 3.
- <sup>30</sup> Steven Schwartz, "Terrorism has a Name—Wahhabism." <u>Free Republic</u>. 05 October 2001.
- <a href="http://www.frerepublic.com/focus/fr/540730/posts">http://www.frerepublic.com/focus/fr/540730/posts</a> [24 January 2002].
- <sup>31</sup> A brief history of the House of Saud's historical ties to Wahhabism and support of fanatics can be found in: Judith Miller, <u>God Has Ninety-Nine Names</u> (New York: Simon & Schuster, 1996), 96-104,117-119.
- <sup>32</sup> Bergen, 100.
- <sup>33</sup> Martin Indyk, "Back to the Bazaar." Foreign Affairs, January/February 2000,
- <a href="http://www.foreighaffairs.org/articles/Indyk0102.html">http://www.foreighaffairs.org/articles/Indyk0102.html</a> [01 February 2002].
- <sup>34</sup>Shaykh Muhammad Hisham Kabbani of the Islamic Supreme Council of America estimates that as many as 80% of mosques in the United States are under the control of Wahhabi imams. Muhammad Hisham Kabbani, "Islamic Extremism: A Viable Threat to U.S. National Security," (An open forum at the U.S. Department of State, January 7, 1999), <a href="http://islamicsupremecouncil.org/radicalmovements/Islamic extremeism.htm">http://islamicsupremecouncil.org/radicalmovements/Islamic extremeism.htm</a> [01 February 2002].
- <sup>35</sup> "Schools for Fanaticism," <u>Vega</u>, 25 (October 2001) reprint <u>World Press Review</u>, (January 2002): 13, The number of *madrassas* in Pakistan and other parts of the Islamic world is an estimate. The Hindustan times puts the number of *madrassas* in Pakistan at 7,500 with 750,000 to a million students. Rick Bragg, "Madrassas nurture young Islamic minds for jehad," <u>Hindustan Times</u>. 14 October 2001.
- <a href="http://www.hindustantimes.com/nonfram/151001/dLAME06.asp/">http://www.hindustantimes.com/nonfram/151001/dLAME06.asp/</a> [20 December 2001].
- <sup>36</sup> Bergen, 146-149.
- <sup>37</sup> Robert D. Kaplan, <u>The Coming Anarchy</u>, <u>Shattering the Dreams of the Post Cold War</u> (New York: Vintage Books, a Division of Random House, 2000), 44.
- <sup>38</sup> Hashim, 27.
- <sup>39</sup> Bergen, 50.
- <sup>40</sup> Hashim, 21-22; Bergen, 51-59.
- 41 Hashim 20
- <sup>42</sup> Bergen, 55. Bergen cites several sources within a range of 25,000 to 50,000, with a CIA source stating the former.
- <sup>43</sup> "Eight down, many more to go," The Economist, 24 (November 2002): 19.
- <sup>44</sup> "Middle East—Bin Laden Prognosis," <u>In Perspective, The Oxford Analytica Weekly Column</u>. 30 November 2001, <a href="http://www.ciaonet.org/pbei/oxan/oxa11302001.html/">http://www.ciaonet.org/pbei/oxan/oxa11302001.html/</a>> [21 December 2001].
- <sup>45</sup> Bergen, 104.
- 46 "Middle East—Bin Laden Prognosis."
- <sup>47</sup> Samuel P. Huntington, <u>The Clash of Civilizations and the Remaking of the World Order</u> (New York: Simon and Schuster, 1996), 263-265.
- Schuster, 1996), 263-265.

  Bernard Lewis, <u>Islam and the West</u>. (New York: Oxford University Press, 1993), 5; Department of State, <u>Patterns of Global Terrorism-2000</u> (Washington, DC: 2001), Appendix B, 11.
- <sup>49</sup> Alberts, Garstka, and Stein, 90-91.
- <sup>50</sup> Bergen, 37-38.
- <sup>51</sup> Alberts, Garstka, and Stein, 32.
- <sup>52</sup> Ibid., 103.

<sup>&</sup>lt;sup>53</sup> Ibid., 120.

<sup>&</sup>lt;sup>54</sup> Vego, 198.

<sup>&</sup>lt;sup>55</sup> Jack Kelley, "Terror groups hide behind Web encryption," <u>USA Today</u>. 19 June 2001. <a href="http://www.usatoday.com/life/cyber/tech/2001-02-05-binladen.htm">http://www.usatoday.com/life/cyber/tech/2001-02-05-binladen.htm</a> [22 January 2002].

<sup>&</sup>lt;sup>56</sup> Department of State, 5.

<sup>&</sup>lt;sup>57</sup> Bergen, 185.

<sup>&</sup>lt;sup>58</sup> "U.S. studying intelligence to avert attacks," Newport (R.I.) Daily News, 11 January 2002, A3.

<sup>&</sup>lt;sup>9</sup> Bergen, 59.

<sup>&</sup>lt;sup>60</sup> Walter Lacquer "Reflections on Terrorism" <u>The Terrorism Reader</u>, eds. Walter Laquer, Yonah Alexander (New York: NAL Penguin, 1987), 387.

<sup>&</sup>lt;sup>61</sup> Henry Kissenger and Stephen Schwartz reach similar conclusions about liberating Islam from Wahhabi fanaticism. Henry A. Kissenger, "Phase II and Iraq," <u>The Washington Post</u>, 13 January 2002, <a href="http://ebird.dtic.mil/Jan2002/s20020114phase.htm">http://ebird.dtic.mil/Jan2002/s20020114phase.htm</a> [14 January 2002]; Stephen Schwartz, "Liberation, not Containment," <u>National Review</u>, 30 November 2001, <a href="https://www.nationalreview.com/comment/comment-schwartz113001shtml">https://www.nationalreview.com/comment/comment-schwartz113001shtml</a> [24 January 2002].

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